7400106

THUE UNIVERD STRAFFS OF AMERICA

Minnesota Agricultural Experiment Station

Caherens, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO-IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SEVENTERN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS FIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Hodgson'

In Testimony Whereot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 18th day of April in

this 18th day of April in the year of our Lord one thousand nine hundred and seventy-five

Earl L Betz

Secretary of Agriculture

Allert

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Commissioner Plant Variety Protection Office Grain Division

Stain Division Agricultural Marketing Service

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

FORM APPROVED OMB NO. 40-R3712

STRUCTIONS: See Reverse. VARIETY NAME OR TEMPORARY	2. KIND NAME			IAL USE ONLY
DESIGNATION			PV NUMBER 74	00106
Hodgson	Soybean 4. FAMILY NAME (Bot	anical)	FILING DATE	TIME 1 3
GENUS AND SPECIES NAME Glycine max	Leguminos		6.27.74	1:30 P.
	5. DATE OF DETERM	IINATION	\$250.00	\$
	December	27,1973	\$ 250.00	\$
NAME OF APPLICANT(S)	7. ADDRESS (Street an		., City, State, and ZIP	8. TELEPHONE ARE CODE AND NUMB
Minnesota Agricultural Experiment Station	Univers	ite of Agricu sity of Minne il, Minnesota	sota	612/373-0867
· · · · · · · · · · · · · · · · · · ·	DOC'S TO SERVICE OF THE PROPERTY OF THE PROPER	T10 c===	ORPORATION	11. DATE OF INCOF
IF THE NAMED APPLICANT IS NOT A PEORGANIZATION: (Comporation, partnership, State Experiment Station	RSON, FORM OF , association, etc.)	10. STATE OF INC	JAFORA HON	11. DATE OF INCOR
· Name and mailing address of applic	cant representation/), if any to see	e in this application	and receive all pape
Institute of Agriculture University of Minnesota St. Paul, Minnesota 55101	HMENT SUBMITTED:			
13A. Exhibit A, Origin and Bre 13B. Exhibit B, Botanical Description 13C. Exhibit C, Objective Description	cription of the Variet	ty		,
130. Exhibit D, Data Indicative				
X 73E. Exhibit E, Statement of th			ety name columnia	ass of certified and
4A. Does the applicant(s) specify tha (See Section 83(a), (If "Yes," as	at seed of this variet nswer 14R and 140 h	pelow.)	XIYES IND	<u></u>
(See Section 83(a), (If Yes, and 14B. Does the applicant(s) specify that	at this variety be	14C. If ''Yes,''	to 14B, how many ger	
limited as to number of generation	ons?	beyond bre	eder seed? TION REGISTERE	ED CERTIFIE
The applicant declares that a viable ance of a certificate and will be repl	lenished periodically	in accordance w	ith such regulations a	as may be applicable
	is sexually-reproduce	ed novel plant var	riety believes that the	e variety is distinct,
The undersigned applicant(s) of thi uniform, and stable as required in S Plant Variety Protection Act.	Section 41 and is ent	•		
The undersigned applicant(s) of thi uniform, and stable as zequired in S Plant Variety Protection Act.	Section 41 and is ent		otection and result in	
The undersigned applicant(s) of thi uniform, and stable as required in	Section 41 and is ent			penalties.
The undersigned applicant(s) of this uniform, and stable as required in Stable Variety Protection Act.	Section 41 and is ent		(SIGNATURE OF APPLIC	penalties.

INSTRUCTIONS

GENERAL: Send and original copy of the application, exhibits and \$250.00 fee to 1.50 Data to Assiculture, Agricultural Marketing Service, Grain Division 1521 telegraph Road, Hyattsville, Maryland 20782. (See Section 180.1) of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

REVISED RYS
Exhibit A

ORIGIN AND BREEDING HISTORY OF HODGSON SOYBEANS

 ${
m Hodgson}$ traces to an ${
m F}_4$ plant selected in the progeny of an ${
m F}_3$ plant from a cross of Corsoy and M372. M372 is also identified by the number M53-117 and is a selection from M10 \times PI180.501. M10 is a Minnesota selection from a backcross of Lincoln x (Lincoln x Richland). PI180.501 is an introduction from the Max Planck Institute in Germany. The F $_5$ row from Corsoy x M372 was bulked to provide seed for yield-testing in F6. This seed was a mixture of hilum colors (yellow and buff). Yield testing initially was done on the mixture. When the superiority of the strain was evident, the progenies of 11 buff hilum plants were bulked as a seed source to compare with the mixture. Two years of testing indicated that the pure buff lot was equal or superior to the mixture. So a purification program was initiated with the original mixture as a source population. As a result, the progeny of 68 buff hilum plants eventually became the basis for the present foundation seed of Hodgson. Hodgson has been yield-tested in Minnesota for six years and regionally for three. It was released to registered and/or certified seed growers in Minnesota and five other states on April 1, 1974.

EXHIBIT B

Botanical Description of Hodgson Soybeans

'Hodgson' is an indeterminate Group I variety of soybean (Glycine max, L., Merr.). The plants are of medium height with 15 to 20 nodes on the main stem. They produce a medium broad but open canopy. The leaves are dark bluish green at full canopy with well defined lighter green veins. The seventh, eighth, ninth and tenth trifoliolate leaves are usually largest. Petioles of these leaves may be 10-12 inches long and the oval leaflets may be 2.5 to 4.0 inches in width. Leaflets on the upper leaves are smaller and the petioles shorter. In moderate spacings within rows, two to four well attached branches usually develop. Both the branches and the leaf petioles are attached at a medium angle with the main stem. An unusual characteristic of 'Hodgson' is the tendency of many plants (20-50%) to have the first two trifoliolate leaves attached opposite to each other at the same node rather than alternate at separate nodes. The axillary branches that commonly form on the lower nodes of the stem follow this "opposite" pattern at the first trifoliolate node on many plants also. The flowers are medium-sized and bright purple. Commonly there are two sessile flowers and one short raceme with two to five flowers at each node. The pubescence is gray and fairly dense. The stems tend to turn a fairly dark brown at maturity as do also the pods. This dark pigmentation under the distinctly gray pubescence gives a "dirty gray" appearance to the mature plants. The stems have a medium diameter but are strong. The mature plant presents a good profile for harvesting. Seed coats are yellow, hila are buff.

7400106

CHARACTER	VARIETY MOST C		SEMBLES I	HATSU	SMIT TED.				
Plant shape		NAME OF VARIETY			CHARACTER		NAME OF VARIETY		
Leaf shape	Clay				Petiole	angle	Cors		
Leaf color		Corsoy			Seed size		Hark		
Leaf surface		Corsoy			Seed shape		Hark		
	CORSOY	MILAR STA	MDARD VA	PIETY.	Seedling pi	mentation	Cors		
VARIETY	1 4 [LODGING	PLANT		AF SIZE	CONT	TMT	AVERAGE NO.	

VARIETY	NO. OF DAYS		PLANT	LEAP SIZE		CONTENT		AVERAGE NO.	
	TO MATURITY	SCORE	HEIGHT	Width	Length	Protein	Oil	OF PODS PER PLANT	IODINE NO.
Submitted	121	2.2	36			39.8	22.7 %		
Name of similar variety Chippewa 64	121	2.2	37	- "		41.7	21.1		<u> </u>

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

- 1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
- 2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
- 3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY			
Light Green	''Ada''			
Medium Green	"Wilkin"			
Dark Green	''Swift''			

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	''Amsov''
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Victh"
Bushy	"Adelphia"

REVISED RYS

Data Indicative of Novelty in Hodgson Soybeans

'Hodgson' is most similar to 'Corsoy'; however, 'Hodgson' matures 8 to 10 days earlier, is several inches shorter, and has significantly better resistance to lodging. Also the tendency for opposite positioning of the first two trifoliolate leaves found in 'Hodgson' is not expressed in 'Corsoy'. Seeds of 'Hodgson' have buff hila; seeds of 'Corsoy' have yellow hila.

Exhibit E

The Minnesota Agricultural Experiment Station is the employer of the breeder, Dr. J. W. Lambert, and reserves all rights afforded by protection of the Hodgson variety.

INSTRUCTIONS: See Reverse.

EXHIBIT C (Soybean)

RIECT	IVE	DESC	RIPT	ION	0F	VAR	IE.	TY
	SOY	BEAN	(GLY	INF	MA	۷١		

NAME OF APPLICANT(S)	
Minnesota Agricultural Experiment Statio	FOR OFFICIAL USE ONLY
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	
Institute of Agriculture	7400106
University of Minnesota	VARIETY NAME OR TEMPORARY DESIGNATION
St Paul Minnocoto 55303	Modeson
Place the appropriate number that describes the varietal char	acter of this variety in the bares believe
SEED SHAPE	this variety in the boxes below.
1 = SPHERICAL 2 = SPHERICAL 3 = ELONGAT	E 4 = OTHER (Specify)
2. SEED COAT COLOR:	SHADE:
1 = YELLOW 2 = GREEN 3 = BROWN	
5 = OTHER (Specify)	4 = BLACK 2 1 = LIGHT 2 = MEDIUM 3 = DARK
3. SEED COAT LUSTER:	4. SEED SIZE
1 = OULL 2 = SHINY	17 3 GRAMS PER 100 SEEDS
5. HILUM COLOR.	SHADE
1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY	
6 = BLACK 7 = OTHER (Specify)	BLACK 2 = LIGHT 2 = MEDIUM 3 = DARK
6. COTYLEDON COLOR:	7. LEAFLET SIZE (See Reverse):
1 = YELLOW 2 = GREEN	2 1 = SMALL 2 = MEDIUM 3 = LARGE
8. LEAFLET SHAPE:	
• 	ELLIPTICAL 5 = OTHER (Specify)
9. LEAF COLOR (See reverse):	10. FLOWER COLOR:
2 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK G	_ · · · · · · · · · · · · · · · · · · ·
	1 = WHITE 2 = PURPLE 3 = OTHER (Specify)
11. POD COLOR:	12: POD SET:
2 = BROWN 3 = BLACK	1. 1 = scattered 2 = concentrated
13. PLANT PUBESCENCE COLOR:	SHADE
1 = GRAY 2 = BROWN 3 = OTHER (Specify)	3 1 = LIGHT 2 = MEDIUM 3 = DARK
14. PLANT TYPES (See Reverse):	15. PLANT HABIT:
1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE)=DETERMINATE 2+MDFTSDMM
16. HYPOCOTYL COLOR:	2 3 = OTHER (Specify)
	17. SEED PROTEIN:
2 1 = GREEN 2 = PURPLE	? l = A 2 = B
18. NUMBER OF DAYS TO FLOWERING 19. MATURITY GROUP:	
days are 9 or less.)	=0 3=1 4=11 5±111
7 = 1 3 6 = IV 7 =	= ∨ 8 = ∨ı 9 = ∨ıı 10 = ∨ııı
20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (e.g. 0 2) when size is 9 mm. or less.)	Growth Chamber) AT 25° C. (Place a zero in first box
MM. LENGTH	MM. WIDTH
21. DISEASE: (Enter 0 : Not Tested; 1 Susceptible; 2 - Resistant)	OF COTYLEDON
1 BACTERIAL COMPENS	
PUSTULE U CYST	TAIN TO STEM BLIGHT TO ROOT
	TARGET T BROWN
O SUO RHIZOCTONIA	THER (Specify)
<u> </u>	